



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2023-1222; Project Identifier AD-2023-00574-T]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to supersede Airworthiness Directive (AD) 2021-02-15, which applies to certain The Boeing Company Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747-400D, 747-400F, and 747SR series airplanes. AD 2021-02-15 requires repetitive replacement of certain parts; an inspection to determine production configuration for certain parts; repetitive lubrication of certain parts and a repetitive inspection of certain parts for any exuding grease; repetitive inspections of certain parts for loose or missing attachment bolts, cracks or bushing migration, cracks or gouges, or broken, binding, or missing rollers; repetitive inspections of certain parts for cracks or corrosion; repetitive lubrication; and on-condition actions if necessary. Since the FAA issued AD 2021-02-15, the FAA determined that certain compliance times must be reduced in order to address the unsafe condition. This proposed AD would continue to require the actions specified in AD 2021-02-15 with certain reduced compliance times. The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to [regulations.gov](https://www.regulations.gov). Follow the instructions for submitting comments.

- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-1222; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, any comments received, and other information. The street address for Docket Operations is listed above.

Material Incorporated by Reference:

- For service information identified in this NPRM, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; website myboeingfleet.com.

- You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available at [regulations.gov](https://www.regulations.gov) by searching for and locating Docket No. FAA-2023-1222.

FOR FURTHER INFORMATION CONTACT: Stefanie Roesli, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; phone: 206-231-3964; email: Stefanie.N.Roesli@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under ADDRESSES. Include “Docket No. FAA-2023-1222; Project Identifier AD-2023-00574-T” at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this NPRM.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public

docket of this NPRM. Submissions containing CBI should be sent to Stefanie Roesli, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; phone: 206-231-3964; email: Stefanie.N.Roesli@faa.gov. Any commentary that the FAA receives that is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

The FAA issued AD 2021-02-15, Amendment 39-21398 (86 FR 10750, February 23, 2021) (AD 2021-02-15), for certain The Boeing Company Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747-400D, 747-400F, and 747SR series airplanes. AD 2021-02-15 was prompted by reports of partial and full inboard foreflap departures from the airplane. Inboard flap departures have been attributed to inadequate lubrication of the outboard fitting assembly, corrosion of the outboard fitting assembly, and corrosion in the inboard link assembly. In addition, broken center toggle rollers at the inboard sequence carriage and binding of inboard foreflap tracks due to defective or seized foreflap track rollers can lead to higher than normal loads on the outboard fitting assembly and the inboard link assembly. AD 2021-02-15 requires repetitive replacement of certain parts; a general visual inspection to determine production configuration for certain parts; a repetitive lubrication of certain parts and a repetitive general visual inspection of certain parts for any exuding grease; repetitive detailed inspections of certain parts for loose or missing attachment bolts, cracks or bushing migration, cracks or gouges, or broken, binding, or missing rollers; repetitive detailed inspections of certain parts for cracks or corrosion; repetitive lubrication; and on-condition actions if necessary. The agency issued AD 2021-02-15 to address departures of the inboard foreflap assembly from the airplane, which could result in damage to the airplane and adversely affect the airplane's continued safe flight and landing.

Actions Since AD 2021-02-15 Was Issued

Since the FAA issued AD 2021-02-15, the FAA determined that certain compliance times must be reduced in order to address the unsafe condition. Boeing Alert Requirements Bulletin 747-57A2367 RB, dated November 15, 2019, which is the appropriate source of service information for accomplishing the actions required by AD 2021-02-15, includes compliance times in Tables 1 through 4 of the “Compliance” paragraph that specify “whichever occurs later” instead of “whichever occurs first.”

Boeing issued Boeing Alert Requirements Bulletin 747-57A2367 RB, Revision 1, dated March 20, 2023, to reduce the compliance time by replacing “Within 2 years after the original issue date of Requirements Bulletin 747-57A2367 RB or within 1,960 flight cycles after the original issue date of Requirements Bulletin 747-57A2367 RB, whichever occurs later” with “Within 2 years after the Revision 1 date of Requirements Bulletin 747-57A2367 RB or within 1,960 flight cycles after the original issue date of Requirements Bulletin 747-57A2367 RB, whichever occurs first.”

FAA’s Determination

The FAA is issuing this NPRM after determining that the unsafe condition described previously is likely to exist or develop on other products of the same type design.

Related Service Information under 1 CFR Part 51

The FAA reviewed Boeing Alert Requirements Bulletin 747-57A2367 RB, Revision 1, dated March 20, 2023. This service information specifies procedures for repetitive replacement of certain parts; a general visual inspection to determine production configuration for certain parts; a repetitive lubrication of certain parts and a repetitive general visual inspection of certain parts for any exuding grease; repetitive detailed inspections of certain parts for loose or missing attachment bolts, cracks or bushing migration, cracks or gouges, or broken, binding, or missing rollers; repetitive

detailed inspections of certain parts for cracks or corrosion; repetitive lubrication; and on-condition actions if necessary. On-condition actions include replacements and repair.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in ADDRESSES.

Proposed AD Requirements in this NPRM

Although this proposed AD does not explicitly restate the requirements of AD 2021-02-15, this proposed AD would retain all the requirements of AD 2021-02-15, with certain reduced compliance times. Those requirements are referenced in the service information identified previously, which, in turn, is referenced in paragraph (g) of this proposed AD.

This proposed AD would require accomplishing the actions specified in the service information already described and except for any differences identified as exceptions in the regulatory text of this proposed AD. For information on the procedures and compliance times, see this service information at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-1222.

Costs of Compliance

The FAA estimates that this AD, if adopted as proposed, would affect 134 airplanes of U.S. registry. The FAA estimates the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Repetitive replacement (retained actions from AD 2021-02-15)	Up to 10 work-hours X \$85 per hour = Up to \$850 per replacement cycle	\$35,719	Up to \$36,569 per replacement cycle	Up to \$4,900,246 per replacement cycle
General visual inspection for parts production configuration (retained actions from AD 2021-02-15)	1 work-hour X \$85 per hour = \$85	\$0	\$85	\$11,390
Repetitive detailed inspections (retained actions from AD 2021-02-15)	4 work-hours X \$85 per hour = \$340 per inspection cycle	\$0	\$340 per inspection cycle	\$45,560 per inspection cycle
Repetitive inspection for lubrication and repetitive lubrication (retained actions from AD 2021-02-15)	1 work-hour X \$85 per hour = \$85 per lubrication	\$0	\$85 per lubrication	\$11,390 per lubrication

The FAA estimates the following costs to do any necessary on-condition actions that would be required. The FAA has no way of determining the number of aircraft that might need these on-condition actions:

Estimated costs of on-condition replacements

Labor cost	Parts cost	Cost per product
Up to 8 work-hour X \$85 per hour = \$680	Up to \$17,720	Up to \$18,400

The FAA has received no definitive data that would enable the FAA to provide cost estimates for the on-condition repairs specified in this proposed AD.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator.

Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Would not affect intrastate aviation in Alaska, and
- (3) Would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by:

a. Removing Airworthiness Directive (AD) 2021-02-15, Amendment 39-21398

(86 FR 10750, February 23, 2021), and

b. Adding the following new AD:

The Boeing Company: Docket No. FAA-2023-1222; Project Identifier

AD-2023-00574-T.

(a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) by
[INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL
REGISTER].

(b) Affected ADs

This AD replaces AD 2021-02-15, Amendment 39-21398 (86 FR 10750,
February 23, 2021) (AD 2021-02-15).

(c) Applicability

This AD applies to The Boeing Company Model 747-100, 747-100B,
747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747-400D,
747-400F, and 747SR series airplanes, certificated in any category, as identified in
Boeing Alert Requirements Bulletin 747-57A2367 RB, Revision 1, dated March 20,
2023.

(d) Subject

Air Transport Association (ATA) of America Code 57, Wings.

(e) Unsafe Condition

This AD was prompted by reports of partial and full inboard foreflap departures from the airplane. The FAA is issuing this AD to address departures of the inboard foreflap assembly from the airplane, which could result in damage to the airplane and adversely affect the airplane's continued safe flight and landing.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Retained Actions, With Revised Compliance Times and Service Information

This paragraph restates the requirements of paragraph (g) of AD 2021-02-15, with revised compliance times and service information. Except as specified by paragraph (h) of this AD: At the applicable times specified in the "Compliance" paragraph of Boeing Alert Requirements Bulletin 747-57A2367 RB, Revision 1, dated March 20, 2023, do all applicable actions identified in, and in accordance with, the Accomplishment Instructions of Boeing Alert Requirements Bulletin 747-57A2367 RB, Revision 1, dated March 20, 2023.

Note 1 to paragraph (g): Guidance for accomplishing the actions required by this AD can be found in Boeing Alert Service Bulletin 747-57A2367, Revision 1, dated March 20, 2023, which is referred to in Boeing Alert Requirements Bulletin 747-57A2367 RB, Revision 1, dated March 20, 2023.

(h) Exceptions to Service Information Specifications

(1) Where the Compliance Time columns of the tables in the "Compliance" paragraph of Boeing Alert Requirements Bulletin 747-57A2367 RB, Revision 1, dated March 20, 2023, use the phrase "the original issue date of Requirements Bulletin 747-57A2367 RB," this AD requires using March 30, 2021 (the effective date of AD 2021-02-15).

(2) Where the Compliance Time columns of the tables in the “Compliance” paragraph of Boeing Alert Requirements Bulletin 747-57A2367 RB, Revision 1, dated March 20, 2023, use the phrase “the Revision 1 date of Requirements Bulletin 747-57A2367 RB,” this AD requires using “the effective date of this AD.”

(i) Credit for Previous Actions

This paragraph provides credit for the actions specified in paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Boeing Alert Requirements Bulletin 747-57A2367 RB, dated November 15, 2019.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, AIR-520 Continued Operational Safety Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (k)(1) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by The Boeing Company Organization Designation Authorization (ODA) that has been authorized by the Manager, AIR-520 Continued Operational Safety Branch, FAA, to make those findings. To be approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(4) AMOCs approved for AD 2021-02-15 are approved as AMOCs for the corresponding provisions of Boeing Alert Requirements Bulletin 747-57A2367 RB, Revision 1, dated March 20, 2023, that are required by paragraph (g) of this AD.

(k) Related Information

(1) For more information about this AD, contact Stefanie Roesli, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; phone: 206-231-3964; email: Stefanie.N.Roesli@faa.gov.

(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (l)(3) and (4) of this AD.

(l) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Boeing Alert Requirements Bulletin 747-57A2367 RB, Revision 1, dated March 20, 2023.

(ii) [Reserved]

(3) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; website myboeingfleet.com.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, fr.inspection@nara.gov, or go to: www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on June 15, 2023.

Michael Linegang, Acting Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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